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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,710	11/17/2003	Ulrich Grosser	PO-7872/LeA 35,956	2332

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EXAMINER

FLANIGAN, ALLEN J

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/714,710	GROSSER ET AL.	
	Examiner	Art Unit	
	Allen J. Flanigan	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>05-07-04</u> | 6) <input type="checkbox"/> Other: _____ |

Applicant's election with traverse of invention I, claims 1-9, in the reply filed on 2/16/2006 is acknowledged. The traversal is on the ground(s) that the "the search classification for each invention group substantially [sic] overlap". This is not clearly understood. The classification for each group is in separate classes, as pointed out previously. Asserting that the *search field* overlaps to some degree, even if true, is not found persuasive because a proper traversal must point out the alleged errors in the holding of patentable distinctness.

The requirement is still deemed proper and is therefore made FINAL.

Claims 10 and 11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 2/16/2006.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, in clause (b), recites "at least one of" an upper sheet and a lower sheet. Thus, the use of the word "and" at the end of line 16 (end of clause (i)) is improper, because the scope of claim 1 includes the possibility of only an upper or lower sheet being provided, not both. The claim should be amended by changing "and" to "or", or by removing the "at least one of" recitation in

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clause (b). Similarly, the recitations of claims 3 and 5 are inconsistent with the possibility that an upper and lower sheet may not both be present.

The claims will be construed as if the "and" in clause (i) above has been changed to "or", rendering them broad in scope.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tousignant.

See in particular the Figs. 10-13 embodiments, with upper and lower passages formed between cover films 304, 306 and frame 308. Note that Tousignant teaches that all of these elements may be made of plastic material (bottom of column 5, middle of column 6). Regarding claim 5, note that Tousignant discuss (lines 14-19 of column 6) an embodiment with a laminate containing a polypropylene film having a thickness of 3 mils, or 0.076 mm.

Regarding claim 7, note the Figs. 7-9 embodiment with integrally formed inlet and outlet bores.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tousignant.

Tousignant does not give specific dimensions for the hydraulic diameter of the flow passages in the panel exchanger. The Examiner hereby takes Official Notice that it is well known within the art to size the flow passages of heat exchangers of diverse types to provide the required flow area to permit the heat exchanger to handle the desired throughput or flow capacity for heating or cooling fluid. In other words, for any given application, the parameters of the panel (surface area, flow passage area or hydraulic diameter) can be readily selected to meet the requirements of the application (heat transfer surface area and fluid flow capacity). ***In re Malcolm*, 54 U.S.P.Q. 235.**

Regarding claim 8, this claim is a product by process claim. See MPEP 2113. One of the possible means of assembling the flexible sheets to the frame of Tousignant is heat sealing; it is believed that such an assembly means would be structurally indistinguishable from cover sheets sealed to a frame using laser welding. Even assuming arguendo that a structural distinction existed between laser welded sheets and heat sealed sheets, laser welding is an

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extremely well known means of assembling or attaching plastic components together, and to use such a well known means to attach the components of Tousignant would have been obvious to one of ordinary skill in the art. ***See In re Malcom, supra.***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining references show various panel type heat exchangers, some disclosed as being fabricated from thermoplastics.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (571) 272-4910. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Allen J. Flanigan
Primary Examiner
Art Unit 3753

AJF